

Summary of the tasks accomplished

The following gives a brief description of each task/sub-task outlined in the proposal and its status.

1. Compress and clean raw data file for permanent storage
We have identified various error conditions/types and developed algorithms to get rid of these errors/noises, including the more complicated noise in the newer data sets. (status = 100% complete).
2. Internet access of compacted raw data
It is now possible to access the raw data via our web site, <http://sd-www.jhuapl.edu/Aurora/index.html>. The software to read and plot the compacted raw data is also available from the same web site. The users can now download the raw data, read, plot, or manipulate the data as they wish on their own computer. The users are able to access the cleaned data sets (task 1). (status = 100% complete).
3. Internet access of the color spectrograms
This task has also been completed. It is now possible to access the spectrograms from the web site mentioned above. (status = 100% complete).
4. Improve the particle precipitation region classification
The algorithm for doing this task has been developed and implemented. As a result, the accuracies improved. Now the web site routinely distributes the results of applying the new algorithm to the cleaned data set. (status = 100% complete).
5. Mark the classification region on the spectrograms
The software to mark the classification region in the spectrograms has been completed. This is also available from our web site. (status = 100% complete).